June 2002

Four from AFRL will endure ESEP training

by Katherine Gleason, AFRL Public Affairs

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Can you imagine working on solid rocket propellants in the Netherlands, low frequency radars in Sweden, or modeling and simulation in Germany? This summer, when Capt. Royce Beal, Dr. William Pierson, and Gregg Abate head off to Europe to participate in the Engineer and Scientist Exchange Program (ESEP), they'll be doing just that.

ESEP is a Department of Defense program that promotes international cooperation in military research, development, and acquisition through the exchange of defense professionals. The Air Force currently has ESEP agreements with 14 countries.

Beal, an advanced properties materials chemist with the Materials and Manufacturing Directorate, first became interested in ESEP when a co-worker at Edwards AFB was selected to go to Germany through the program.

"I wanted to apply right away," said Beal, "but I was only a second lieutenant with a bachelor's degree, so I wasn't really qualified yet."

What made Beal's interest in ESEP unique was that he wanted to pursue an exchange opportunity in the Netherlands. Although the Air Force has had an ESEP agreement with the Netherlands since 1978, we have never placed anyone in the Netherlands; although, Dutch nationals have been accepted to United States research facilities.

"There are about three colleges in the U.S. that teach Dutch, and I didn't go to any of them," said Beal. "I did, however, have the opportunity to spend two years in the Netherlands on my LDS mission, and became quite proficient in the language while I was there."

Pierson, who works on the evaluation of automated target recognition systems for the Sensors Directorate, first heard of the program in 1999. His fascination with other cultures led him to apply in 2001.

"I thought the program would be an excellent opportunity to learn a great deal about another culture," said Pierson. "Also, and perhaps more importantly, the work I do at AFRL closely parallels some work being done at FOI [AFRL's Swedish counterpart]. So it seemed a natural situation where the Air Force, FOI and I could all benefit."

While Pierson's ESEP application process went smoothly, Beal's was just the opposite.

"The selection board met while I was TDY, and when I returned, I was told that AFPC (Air Force Personnel Center) indicated to AFOSR (Air Force Office of Scientific Research) that I wasn't eligible for the program and shouldn't have been allowed to apply," said Beal. "The selection board had come and gone, and AFOSR hadn't even looked at my application."

Disappointed, but not defeated, Beal contacted AFPC to determine what had caused him to be declared ineligible. When it turned out that a mistake had been made, and Beal was, in fact, eligible, AFPC contacted AFOSR to find out if there was any way he could still participate in ESEP. Fortunately, only seven of the eight ESEP slots had been filled. AFOSR convened a special selection board, and Beal was finally approved.

During his two-year stint in the Netherlands, Beal will be working at TNO, a Dutch research organization that acts as the principal laboratory for the Ministry of Defense and other ministries. His work there on solid rocket propellants will also aid him in his doctorate dissertation. Beal hopes to someday teach chemistry at the Air Force Academy.

Abate, an aerospace engineer in AFRL's Munitions Directorate, Flight Vehicles Integration branch, will be working at The Ernst Mach Institute (EMI) in Freiburg, Germany. He is being assigned to the Numerical Simulation and Material Characterization Department, where he will work as an active link between the experimental aerodynamics group and the numerical simulation group at EMI. His work will include: experimental testing, numerical modeling, analysis of results, and modeling and simulation.

Pierson will spend his time in Sweden working for FOI. He is currently at training, mastering the language for his trip.

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"I'm not entirely certain what projects I'll be working on, but early conversations seem to suggest that I will be working on low frequency (VHF band) synthetic aperture radar (SAR) research," Pierson said.

Pierson earned his bachelor's degree in electrical engineering from the West Virginia Institute of Technology in 1991. He received his master's degree and doctorate degree in electrical engineering from The Ohio State University. His areas of interest include: pattern recognition theory, signal processing, computer vision, and information theory. Pierson was a 2000 co-recipient of the Dr. Samuel M. Burka Memorial Award for the most outstanding technical achievement completed or reported during a year.

Beal earned his Air Force commission in 1995, through the AFROTC program at Utah State University, where he also earned a B.S. in Chemistry. He received a master's degree in Chemistry in 2000 from the University of Delaware, where he is currently working toward his doctorate degree.

Abate received a bachelor's degree in aeronautical engineering from Embry-Riddle Aeronautical University. While working at Eglin Air Force Base, he earned his master's degree and doctorate degree from the University of Florida.

Also selected for ESEP was Capt. Keith Roessig of the Munitions Directorate at Eglin Air Force Base.

Since ESEP's inception, more than 1800 international scientists and engineers have been placed in DoD organizations, and more than 100 USAF military and civilian personnel have been placed overseas. @